	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	107860	(cost or costing or price or pricing or fee or feeing or rate or rating or value or amount) near3 (ship or shipping or transport or transporting or transportation or delivery or delivering)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:15
2	BRS	L2	7478	(compute or computed or computing or determine or determined or determining or determination or find or finding calculate or calculated or calculating or calculation) near5 (postage or 1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:15
3	BRS	L3	97	2 near5 length	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:16
4	BRS	L4	35	2 near5 width	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:16
5	BRS	L5	18	2 near5 height	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:16

	Type	L #	Hits	Search Text	DBs	Time Stamp
6	BRS	L6	54	2 near5 thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:16
7	BRS	L7	235	2 near5 (size or dimension)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:16
8	BRS	L8	743	2 near5 (scale or weight or weighing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:17
9	BRS	L9	2	3 and 4 and (5 or 6)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:17
10	BRS	L10	4	8 and 6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:18
11	BRS	L11	49	8 and 7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:18
12	BRS	L12	2	8 and 9	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:18

	Type	L #	Hits	Search Text	DBs	Time Stamp
13	BRS	L13	51	10 or 11 or 12 *Scanned Ti, Ab, Kwic all*	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:19
14	BRS	L14	70	("5121328" or "2688878" or "2708368" or "2727391" or "3513444" or "5331118" or "5793652" or "5914463" or "6135292" or "4639873").pn. or ((@pd<="19710101" not @pd<="19470101") and (177/25.15 or 705/401 or 705/402 or 705/407 or 705/410).ccls.) *Scanned Ti all*	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/13 18:40

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	DE 19711160 A	19980924			177/25.11;	4
2	US 2689082 A	19540914	Name not available	705/414	235/61PS; 33/548; 708/851	21
3	US 5914464 A	19990622	Vogel; Karl	177/145	177/180; 177/238; 177/25.11; 33/549	13
4	US 5822739 A	19981013	Kara; Salim G.	705/410	235/375; 235/381; 705/401	15
5	US 5535127 A	19960709	Uno; Teruhiko et al.	705/406	356/634; 382/101	49

L13 results

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	US 5121328 A	19920609	Sakai; Tohru et al.	705/407	177/149; 177/25.15; 177/4; 33/712	19
2	US 4639873 A	19870127	Baggarly; Brad A. et al.	705/406	270/52.02; 53/154; 700/221; 705/407	26

L 14 results

DERWENT-ACC-NO: 1998-507420
DERWENT-WEEK: 199844
COPYRIGHT 2005 DERWENT INFORMATION LTD
TITLE: Fully-electronic post box - has size and <u>weight of each entered postal
item used for calculating postage</u> printed on item after input of money or charge card
PRIORITY-DATA: 1997DE-1011160 (March 18, 1997)
PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 19711160 A1	September 24, 1998	N/A	003	G07F 017/26

INT-CL (IPC):   G07B017/02, G07F017/26 , G09F023/10

ABSTRACTED-PUB-NO: DE 19711160A

BASIC-ABSTRACT:

The electronic post box detects the size of each entered mail item, for differentiating
between standard size items and over-size items, with simultaneous weighing of the
mail item, to allow the postal charge to be calculated and displayed.

The required postage can be applied to the postal item upon input of money or a charge
card, with further printing of the location, the time and the date. The postal item may
be returned to the user if it is entered in the incorrect orientation.

USE - For automatic franking of posted mail.

ADVANTAGE - Simple programming of new postal charges.

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OCR Scanned Text - LPAR (9): to measure length, width and height re- spectively. Desirably the affixed end of each of the wiper arms 88, 89 and 90 is reversely bent as at 92 and each engages a contact rail 93, 94 and 95 (Figs. 8 5 and 13), said rails being supported at their ends on the associated plate 71 and insulated there- from. With the construction above described, after the measuring members 73, 74 and 75 are moved 10 to the ends 86 of the associated slots, if for ex- ample, an object or package is placed on platform 66 as shown in Fig. 1 with its corner at the origiii "OlI and engaging the end wall 67 and the rear wall 68 and the measuring members are moved 15 along their associated slots so that the associated fingers 82 engage the end, side and top of tfle box, the wiper arms 88, 89 and 90 controlled by each of the measuring members will place in cir- cuit that portion of the associated resistance bank 20 RB-1, RB-2 and RB-3, correlated with a longi- tudinal, transverse and vertical dimension of object@ In addition, the weight of the object on the platform 66 will affect the weighing scale, which is previously set at zero to compensate for 25 the weight of the frame 65, so that the contact shoe 49 on the -wiper arm 48 mounted on drum 42 will place in circuit that portion of resistance 51 correlated with the weight of the object. The electrical circuits hereinafter describe are 30 controlled by the dimensions and by tlie weight of the object in order to determine the shipping charge or rating (whether according to volume or to weight) upon an indicating device, illustra- tively a drum 97 having its periphery 98 exposed 35 through the front wall 9 9 of the housing 2 1, and' which desirably has such periphery calibrated in monetary units such as in cents, automatically to register the charge or rating of the particular object. 40 If desired, the housing may also have similar indicating drums i0f and 102 calibrated, for ex- ample, in cubic inches and pounds to indicate the . volume and weight respectively of the object and an electric meter 103, desira;bly of the center 45 scale type, having a pointer norma a er position to indicate the ratio of the weig t to the volume or the density of the object, said drums and meterlalso being exposed through the front panel 99 of the casing. The equipment 50 may also have one or more additional control switches to introduce further factors that may be signiflcant in determining the rating of the object. Thus, there is shown on housing 21 a manually operable control switch 104 desigriate 55 the ratio switch,, which serves to set up a pre- determined relation between weight,and volume in determining the rating. Moreover, there is shown a switch 105 designated the zone switch which serves to multiply the basic charge or (;o rating by a predetermined factor illustratively in accordance with the postal or other zone to which the object is to be transported. Thus, the drum 97 will indicate the amount to be charged for transportation of an object placed 6,5 on the equipment, such charge to depend usual- ly on weight. But in all such cases where the volume is to be the controlling factor, such volume rather than the weight, shall control the drum reading, which reading automatically takes 7o into account also the ratio factor determined by switch 104, and the zone factor determined by switch 105, all of which will appear

more clearly from the following description of the electri- cal circuits, 75 10 Referring now to the circuit dfagrani- sliowii in Fig. 13, the three resistance banks designated RB-1, RB-2 and RB-3 are so designed as to place in circuit a resistance of ohmic value which is a function of the logarithm of the dimension bOing measured, said resistance banks being connected in series to provide a combined resistance of olimic value which is a function of the product of the dimensions or the volume of the object being measured. To form each of the resistance banks RB-1, RB-2 and RB-3, as shown in Figs. 8 and 9, the resistance I I I which desirably is a continuous length of wire, is wound on each of the insulating strips 60 in such manner as to provide a plurality of equally spaced runs 112 on the surface of the strip 60 adjacent the associated wiper roller 91 so that such runs 112 may successively IDe engaged by such roller as the associated measuring member is moved. Although each run may be spaced by any desired distance depending upon the incre ts o e measure , in the illustrative embo iment herein shown, they are one inch apart. The resistance wire I I I is so wound on the associated strip 6 0 that when any run II 2 which is associated with a dimension being classified, is engaged by the associated roller 9 1, a resistance of predetermined value which is a function of the logarithm of such dimension will be place in circuit. To this end, -the strip 60 niay have spaced pairs of pegs II 3 extending laterally outward from the surface thereof opposed to the runs I 1 2 and the wire I 1 2 ma'y be wound around such pegs so that the resistance placed in circuit when each run is engaged may be predetermined. To connect the resistance banks RB-1, RB-2 and RB-3 in series, as shown in Fig. 13, one end of resistance wire I I I of resistance bank RB-1, is connected by lead 141 to A. C. main i42. The contact rail 93 which carries wiper arm 88 engaging wire I I I of resistance bank RB- I is connected to one end of wire I I I of resistance bank RB-2. The contact rail 94 which carries wiper arm 89 engaging wire III of resistance bank RB-2 is connected to one end of wire III of resistance bank RB-3. The contact rail 95 which carries wiper arm 90 engaging wire I I I of resistance bank RB-3 is connected by lead 115 to movable contact arm 116 of vollime relay 117, by leads II 5 and I I 8 to movable arm II 9 of discriminator relay 121 and by leads 115, 118 and 122 to fixed contact 123 of volume cost relay 124. Contact rail 95 is also connected by lead 125 to movable arm 126 of double pole single throw switch 127, which may be mounted on front panel 99 of the casing. Fixed contact 128 of switch 127 is connected by lead 129 to one end of resistance 13 1, the other end of which is connected by lead 132 to one end of resistance 133 which is substantially identical to resistance 131 and also by lead 134 to A. C. main 135. The other end of resistance 133 is connected by lead 136 to fixed contact 137 of switch 127, the meter 103 being connected across contacts 128 and 137 to indicate density in the manner hereinafter to be described. Fixed contact 143 of volume relay 117 is connected by lead 144 to wiper arm 145 of volume indicating drum 101 as shown in Figs. 3 and 13 and contact 143 is also connected by lead 146 to fixed contact 147 of volume zero relay 148. As shown in Figs. 2 3 and 4, the volume indioating drum 101 desira@ly comprises a disc 149 of iii-

2

US-PAT-NO: 5914464
DOCUMENT-IDENTIFIER: US 5914464 A
TITLE: Self-service device for processing a mail piece
DATE-ISSUED: June 22, 1999
INVENTOR-INFORMATION:
NAME   CITY STATE   ZIP CODE   COUNTRY
Vogel; Karl   Furth N/A   N/A   DE
US-CL-CURRENT: 177/145, 177/180 , 177/238 , 177/25.11 , 33/549

ABSTRACT: A self-service device allowing postal customers to determine the postage fees for letters and small parcels has a weighing scale and also registers the thickness and format size of the mail piece in a simple manner. A receiving chamber for the mail piece sits on the scale and contains sensors for acquiring the thickness and format information.
27 Claims,   10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 7

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Abstract Text - ABTX (1): A self-service device allowing postal customers to determine the postage fees for letters and small parcels has a weighing scale and also registers the thickness and format size of the mail piece in a simple manner. A receiving chamber for the mail piece sits on the scale and contains sensors for acquiring the thickness and format information.

Brief Summary Text - BSTX (3): The present invention concerns a self-service device for processing a mail piece, particularly a letter or a small parcel, to determine the postage fee with a scale that measures the weight.

Claims Text - CLTX (30): c) computes the postage fee based on the weight and dimensions of the mail piece.

US-PAT-NO: 5822739
DOCUMENT-IDENTIFIER: US 5822739 A
TITLE: System and method for remote postage metering
DATE-ISSUED: October 13, 1998
INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kara; Salim G.	Houston	TX	N/A	N/A

US-CL-CURRENT: 705/410, 235/375 , 235/381 , 705/401

ABSTRACT: A system and method for remote postage metering of postage indicia, including demanding a desired postage amount and subsequently printing the postage indicia onto a piece of mail. A user inputs certain necessary information, as well as additional desired information, into a local processor-based system. The local system then assembles a postage demand in suitable format and transmits the same to a remote postage metering device. The remote postage metering device then verifies the demand for authority to demand and valid funding. Upon verification, the remote postage meter assembles a data packet representing an authorized postage indicia. The data packet is transmitted to the local system for printing. Printing of the postage indicia may be unaccompanied, or may include additional information. Such additional information may include destination and return address, machine readable routing or identification information, or a complete document to be posted.
63 Claims, 3 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

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Brief Summary Text - BSTX (23): The Demand program may be coupled to a word processing program, or other process, residing within the first PC, thus allowing the user to request and subsequently print the postage indicia on correspondence or postal items generated by the coupled process. In such an arrangement, the Demand program may utilize information from the coupled process to determine a correct amount of postage from the context of the correspondence, such as size or weight of paper, draft or correspondence mode, etcetera. Additionally, the Demand program may be programmed to independently print a destination address and return address in addition to the postage indicia to be printed on an item of mail. Thereafter, an item of correspondence bearing the postage indicia can be placed in envelopes with cutouts or glassine paper at the appropriate areas so that the address, return address, and/or postage indicia can be visualized through the envelope

Detailed Description Text - DETX (16): At step 205 the Demand program accepts printing format information to be utilized when ultimately printing the postage indicia. Such formats may include predefined sizes of envelopes and labels as well as user defined items. The Demand program uses the format information for adjusting the postage amount for the size of the postal item as well as for determining the size of postage indicia to be printed. In addition, the printing format information may also be

utilized by the remote metering device for such purposes as determining what information to include in a generated data packet. Printing format acceptance step 205 may be eliminated if desired.

Detailed Description Text - DETX (19): It shall be appreciated, simply by knowing the size and number of pages of correspondence, that generally a very close approximation of the required postage may be calculated based on a standard or common paper weight and envelope size. However, this approximation may be made more precise by inputting information regarding the specific envelope or container to include the correspondence, such as may be determined from the above accepted printing format or may be input directly in a step not shown. Additionally, the precision of the postage determination may be increased by the input of the actual paper weight to be used by the correspondence. This information may be provided by a manual input step (not shown) or may be determined automatically, such as from information as to the context of the document provided by the coupled application.

Detailed Description Text - DETX (20): It shall be appreciated that a user may assign certain paper weights and/or sizes to particular document contexts either within the Demand program (not shown) or within a coupled application. For example, correspondence quality printing from a word processor may be associated with 20 pound bond paper, whereas draft quality printing from the same word processor may be associated with 15 pound paper. Similarly, printing of invoices or statements from an accounting program may be associated with two parts, or two copies, of 15 pound paper. Of course, paper size as well as print quality may be supplied by the coupled process or may be manually input. Thereafter, this information may be utilized by the Demand program to precisely determine the weight, and therefore the proper postage required to post such items, without the need to either weigh the postal item or input its weight.

Detailed Description Text - DETX (38): At step 216, the Demand program causes PC 20, in conjunction with printer 24, to print the postage indicia and any integrated data upon a postal item. Step 216 utilizes portions of the information accepted at steps 203 through 209 to produce a printed result suitable for the user's needs and desires. Printing format information accepted at step 205 is utilized to determine the size, format, and placement of the printed postage indicia. Moreover, depending on user preference, other information, such as postal class, may also be included on the postal item as printed.

US-PAT-NO: 5535127
DOCUMENT-IDENTIFIER: US 5535127 A
TITLE: Processing apparatus for mail with stamps
DATE-ISSUED: July 9, 1996
INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Uno; Teruhiko	Tokyo	N/A	N/A	JP
Hirasawa; Toshio	Kawasaki	N/A	N/A	JP
Sato; Toshio	Yokohama	N/A	N/A	JP
Nakagawa; Kazuyo	Yokohama	N/A	N/A	JP
Takahashi; Hiroshi	Okegawa	N/A	N/A	JP

US-CL-CURRENT: 705/406, 356/634 , 382/101

ABSTRACT: An automatic mail processing apparatus comprises a physical quantity detection section for detecting physical quantities of mail with a stamp, such as the weight and dimensions of the mail, a postage determining section for determining the valid postage for the mail with reference to a table in which valid charges are previously stored on the basis of the information items indicating physical quantities, and a stamp detection section for detecting the amount paid on the basis of the information on the stamp contained in the image of the mail, and a processing section for verifying the determined postage with the amount paid to detect a surplus or deficit of the amount paid, and to identify the kind of the mail, classify the mail, and compile statistics data on the mail.
11 Claims,   55 Drawing figures
Exemplary Claim Number: 10
Number of Drawing Sheets: 35

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Abstract Text - ABTX (1): An automatic mail processing apparatus comprises a physical quantity detection section for detecting physical quantities of mail with a stamp, such as the weight and dimensions of the mail, a postage determining section for determining the valid postage for the mail with reference to a table in which valid charges are previously stored on the basis of the information items indicating physical quantities, and a stamp detection section for detecting the amount paid on the basis of the information on the stamp contained in the image of the mail, and a processing section for verifying the determined postage with the amount paid to detect a surplus or deficit of the amount paid, and to identify the kind of the mail, classify the mail, and compile statistics data on the mail.

Brief Summary Text - BSTX (5): In connection with a conventional method of determining the processing charges for mail etc., a postage determining apparatus as disclosed in Jpn. Pat. Appln. KOKAI Publication No. 2-12021 has been proposed. This apparatus enables the postage for a specified piece of mail to be read from a postage table previously stored in a nonvolatile memory and then displayed, and compared with the weight data on the piece of mail weighed at the metering section, thereby indicating

the postage and the classification of the mail. With this prior art, however, only the weight is measured as physical information on a piece of mail, but the shape or size, which is one of elements determining the postage, is not measured. The operator is still required to judge and enter the kind of mail (standard-size mail, nonstandard-size mail, etc.) from the keyboard. Furthermore, only the necessary postage for the measured weight is displayed. The apparatus is not constructed so as to detect the postal indicia on a piece of mail, for example, the postal indicia of a postage stamp or an indicia by a postage meter or to automatically classify a piece of mail on the basis of the detection result.

Detailed Description Text - DETX (99): As described above in detail, with the present invention, by measuring the physical information on an object in connection with postage, such as the size, thickness, and weight, calculating the valid postage on the basis of a postage table for the physical quantities previously stored, and discriminating the postage on the postal indicia on the object through an image information process, it is determined whether or not the valid postage determined by the physical information has been paid. According to the result, the object can be classified. Statistical data on each type or on the postage for all objects or the number of pieces of mail can be measured. Furthermore, an indicator can be used to display the detected result.

File   2:INSPEC 1969-2005/Feb W4 (c) 2005 Institution of Electrical Engineers
File   9:Business & Industry(R) Jul/1994-2005/Mar 11 (c) 2005 The Gale Group
File   15:ABI/Inform(R) 1971-2005/Mar 12 (c) 2005 ProQuest Info&Learning
File   16:Gale Group PROMT(R) 1990-2005/Mar 14 (c) 2005 The Gale Group
File   20:Dialog Global Reporter 1997-2005/Mar 13 (c) 2005 The Dialog Corp.
File   35:Dissertation Abs Online 1861-2005/Feb (c) 2005 ProQuest Info&Learning
File   65:Inside Conferences 1993-2005/Mar W1 (c) 2005 BLDSC all rts. reserv.
File   99:Wilson Appl. Sci & Tech Abs 1983-2005/Feb (c) 2005 The HW Wilson Co.
File   148:Gale Group Trade & Industry DB 1976-2005/Mar 14 (c)2005 The Gale Group
File   160:Gale Group PROMT(R) 1972-1989 (c) 1999 The Gale Group
File   256:TecInfoSource 82-2005/Jan (c) 2005 Info.Sources Inc
File   275:Gale Group Computer DB(TM) 1983-2005/Mar 14 (c) 2005 The Gale Group
File   347:JAPIO Nov 1976-2004/Oct(Updated 050209) (c) 2005 JPO & JAPIO
File   348:EUROPEAN PATENTS 1978-2005/Feb W04 (c) 2005 European Patent Office
File   349:PCT FULLTEXT 1979-2002/UB=20050310,UT=20050303 (c) 2005 WIPO/Univentio
File   474:New York Times Abs 1969-2005/Mar 09 (c) 2005 The New York Times
File   475:Wall Street Journal Abs 1973-2005/Mar 11 (c) 2005 The New York Times
File   476:Financial Times Fulltext 1982-2005/Mar 12 (c) 2005 Financial Times Ltd
File   583:Gale Group Globalbase(TM) 1986-2002/Dec 13 (c) 2002 The Gale Group
File   610:Business Wire 1999-2005/Mar 13 (c) 2005 Business Wire.
File   613:PR Newswire 1999-2005/Mar 13 (c) 2005 PR Newswire Association Inc
File   621:Gale Group New Prod.Annou.(R) 1985-2005/Mar 14 (c) 2005 The Gale Group
File   624:McGraw-Hill Publications 1985-2005/Mar 10 (c) 2005 McGraw-Hill Co. Inc
File   634:San Jose Mercury Jun 1985-2005/Mar 11 (c) 2005 San Jose Mercury News
File   636:Gale Group Newsletter DB(TM) 1987-2005/Mar 14 (c) 2005 The Gale Group
File   810:Business Wire 1986-1999/Feb 28 (c) 1999 Business Wire
File   813:PR Newswire 1987-1999/Apr 30 (c) 1999 PR Newswire Association Inc

Set	Items	Description
S1	697583	(COST??? OR PRIC??? OR FEE??? OR RAT??? OR VALUE OR AMOUNT) (3N) (SHIP OR SHIPPING OR TRANSPORT OR TRANSPORTING OR TRANSPORTATION OR DELIVERY OR DELIVERING)
S2	15894	(COMPUT???? OR DETERMIN?????? OR FIND??? OR CALCULAT????) (5N) (POSTAGE OR S1)
S3	36	S2 (5N) LENGTH
S4	10	S2 (5N) WIDTH
S5	7	S2 (5N) HEIGHT
S6	14	S2 (5N) THICKNESS
S7	168	S2 (5N) (SIZE OR DIMENSION)
S8	504	S2 (5N) (SCALE OR WEIGHT OR WEIGHING)
S9	0	S3 AND S4 AND (S5 OR S6)
S10	4	S8 AND S6
S11	25	S8 AND S7
S12	0	S8 AND S9
S13	29	S10 OR S11 OR S12
S14	21	RD S13 (unique items) [Scanned ti,kwic all]